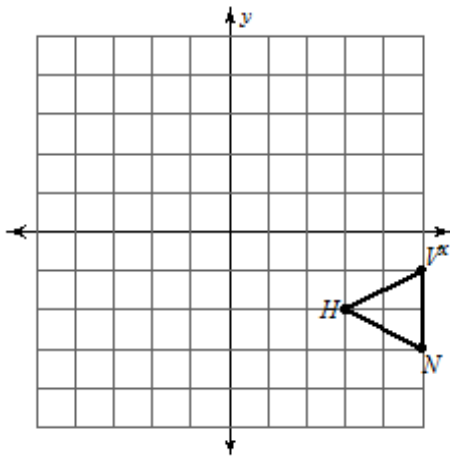


4.3, 4.8 and 4.9 QUIZ REVIEW

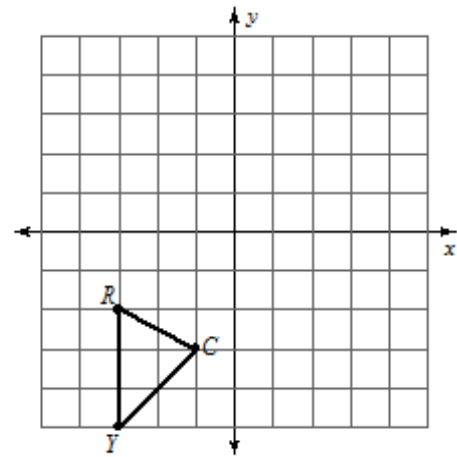
Date _____

Graph the image of the figure using the transformation given.

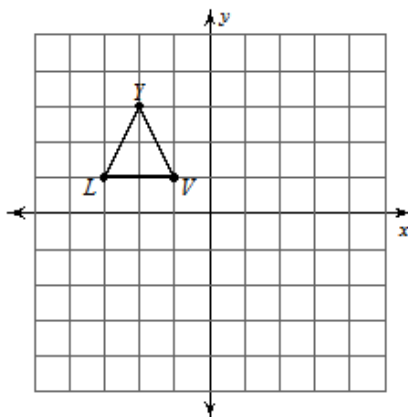
1) translation: $(x, y) \rightarrow (x - 7, y + 1)$



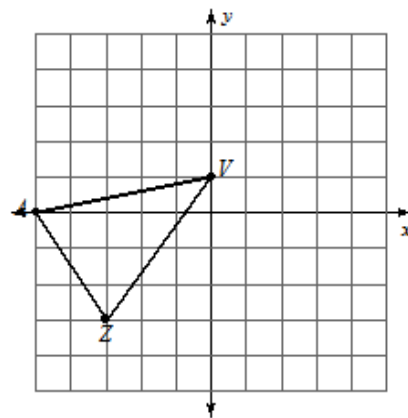
2) translation: $(x, y) \rightarrow (x + 2, y + 7)$



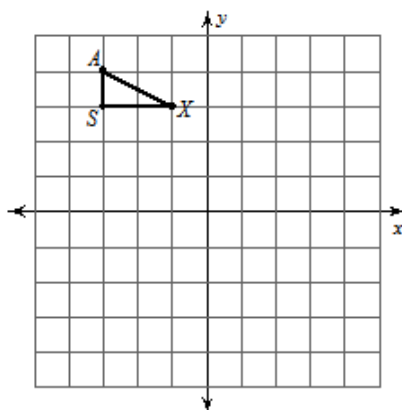
3) rotation 90° counterclockwise about the origin



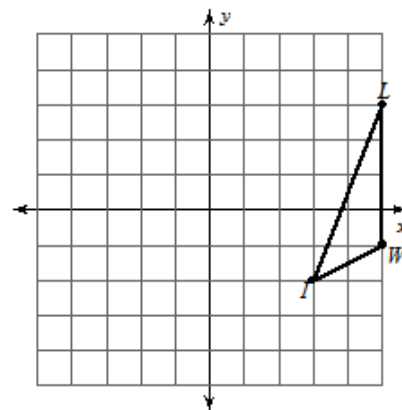
4) reflection across the x-axis



5) reflection across $y = -x$

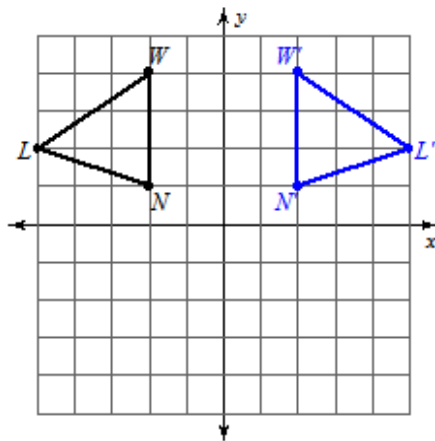


6) rotation 90° clockwise about the origin

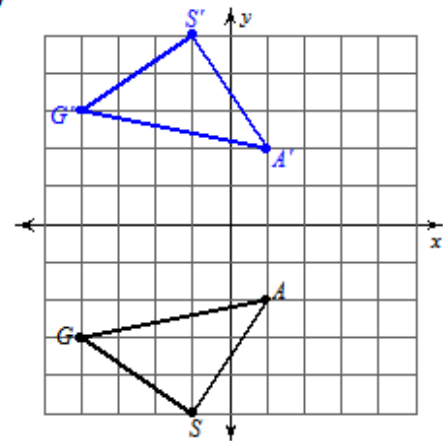


Write a rule to describe each transformation.

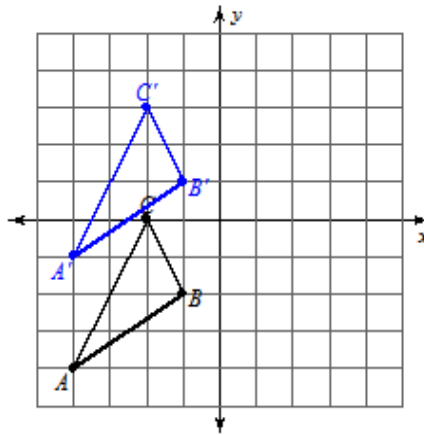
7)



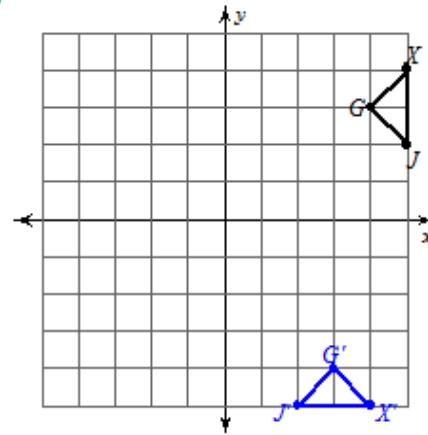
8)



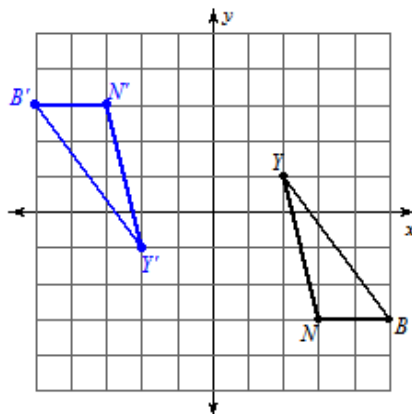
9)



10)



11)



12) $A(-1, -4), V(2, -3), J(4, -5)$
to
 $A(-1, 1), V(2, 2), J(4, 0)$

13) $U(-2, -1), M(-3, 3), J(-1, 2)$
to
 $U(-3, -5), M(-4, -1), J(-2, -2)$

14) $R(-1, -4), E(1, 0), T(4, -4)$
to
 $R(-4, 1), E(0, -1), T(-4, -4)$

Find the coordinates of the vertices of each figure after the given transformation.

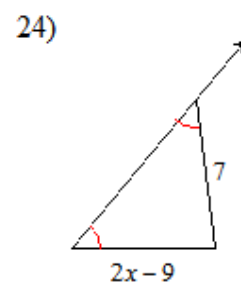
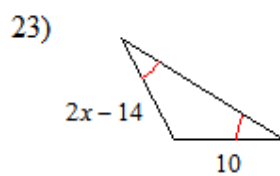
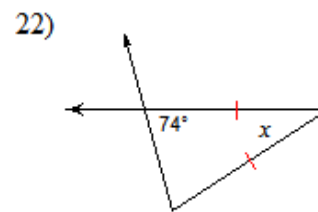
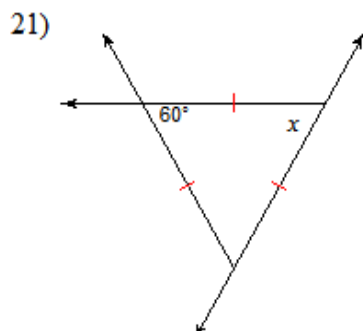
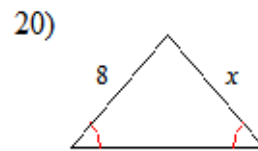
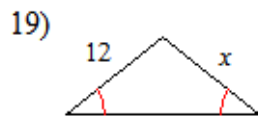
15) rotation 90° clockwise about the origin
 $J(-5, -1), V(-1, 0), S(-2, -5)$

16) translation: $(x, y) \rightarrow (x + 7, y + 5)$
 $M(-4, -4), L(-3, -2), K(-2, -4)$

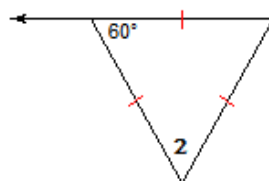
17) rotation 180° about the origin
 $R(-3, 0), F(-2, 2), V(0, -1), I(-3, -5)$

18) translation: 4 units left and 6 units up
 $U(1, -2), T(1, -1), P(5, -1), M(5, -4)$

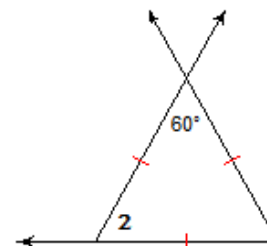
Find the value of x .



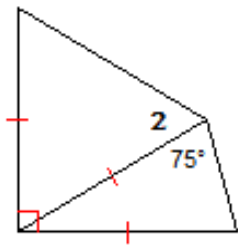
25) $m\angle 2 = x + 72$



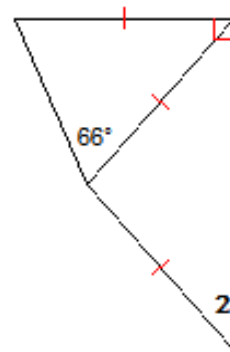
26) $m\angle 2 = x + 69$



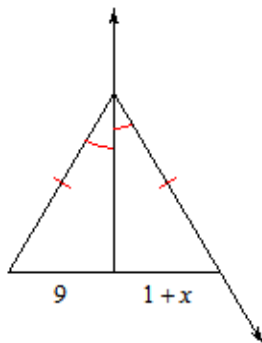
27) $m\angle 2 = x + 71$



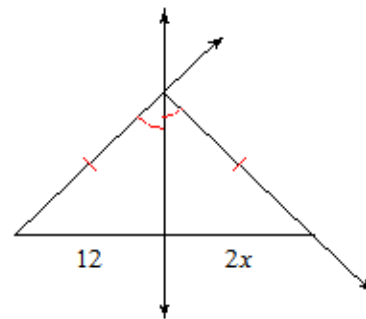
28) $m\angle 2 = x + 50$



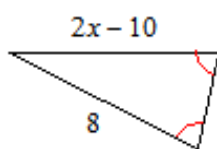
29)



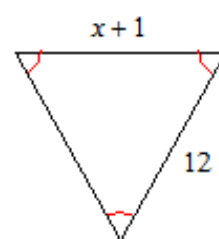
30)



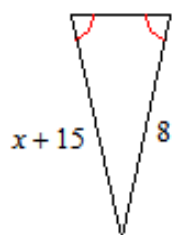
31)



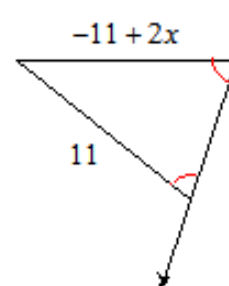
32)



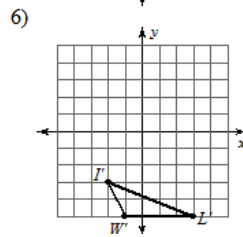
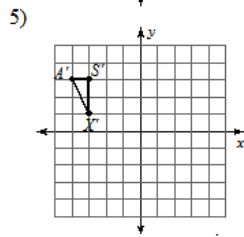
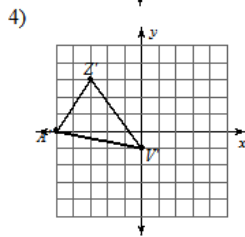
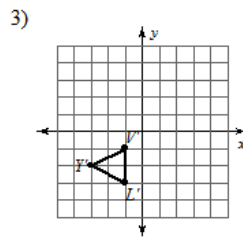
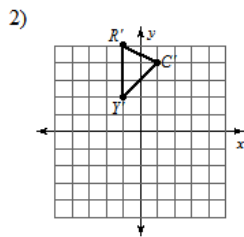
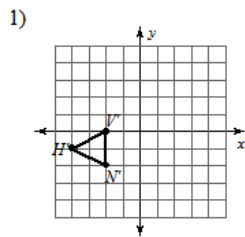
33)



34)



Answers to 4.3, 4.8 and 4.9 QUIZ REVIEW



- 7) reflection across the y-axis 8) reflection across the x-axis 9) translation: $(x, y) \rightarrow (x, y + 3)$
- 10) rotation 90° clockwise about the origin 11) rotation 180° about the origin
- 12) translation: $(x, y) \rightarrow (x, y + 5)$ 13) translation: $(x, y) \rightarrow (x - 1, y - 4)$
- 14) rotation 90° clockwise about the origin 15) $J(-1, 5), V(0, 1), S(-5, 2)$
- 16) $M(3, 1), L(4, 3), K(5, 1)$ 17) $R(3, 0), F(2, -2), V(0, 1), I(3, 5)$
- 18) $U(-3, 4), T(-3, 5), P(1, 5), M(1, 2)$ 19) 12 20) 8
- 21) 60° 22) 32° 23) 12 24) 8
- 25) -12 26) -9 27) -11 28) -8
- 29) 8 30) 6 31) 9 32) 11
- 33) -7 34) 11